

# STP120/STP220/STP620



## Water Temperature Sensor

STP120, STP220 and STP620 water temperature sensors are designed for fast applications, for example hot water generated by a plate heat exchanger. The STP120, STP220 and STP620 temperature sensors are intended for immersion mounting in pipe systems without requiring a pocket (well). The STP120 includes the Vista NTC 1.8 kohm element and the insert probe is made of stainless steel. The STP220 includes the NTC 10 kohm type 2 element for I/NET systems, whilst the STP620 includes the Satchwell NTC 5.02 kohm element. The sensors have a G½" (DN 15) male thread connection. The housing is equipped with a 20mm cable fitting. A 20mm cable gland is supplied.

### SPECIFICATIONS

- Sensor element STP120. . . . . NTC, 1.8 kohm  
at +25 °C (77 °F)
- Sensor element STP220. . . . . NTC, 10 kohm  
at +25 °C (77 °F)
- Sensor element STP620. . . . . NTC, 5.02 kohm  
at +25 °C (77 °F)

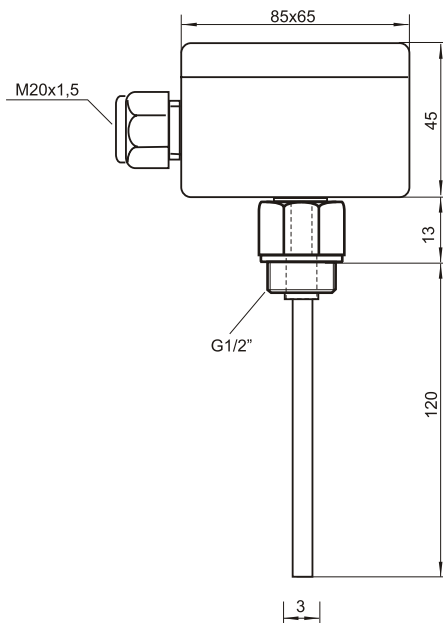
### Ambient temperature

- Operation . . . . . -40 to +120 °C (-40 to +248 °F)
- Storage . . . . . -40 to +100 °C (-40 to +212 °F)
- Time constant. . . . . Approximately 1.5 s
- Accuracy . . . . . Please refer to table on next page
- Pressure rating . . . . . PN 16
- Enclosure rating . . . . . IP 65

### Material

- Connection box . . . . . Polyamide plastic
- Insert pipe . . . . . Stainless steel, SUS 304 (SS 2332)

### DIMENSIONS mm (in)



**ACCURACY**

Temperature	Accuracy of STP120	Accuracy of STP220	Accuracy of STP620
-25 °C/-13 °F	±0.7 °C/±1.3 °F	±0.5 °C/±0.9 °F	±0.6 °C/±1.0 °F
±0 °C/32 °F	±0.5 °C/±0.9 °F	±0.2 °C/±0.4 °F	±0.3 °C/±0.5 °F
25 °C/77 °F	±0.3 °C/±0.5 °F	±0.2 °C/±0.4 °F	±0.2 °C/±0.4 °F
50 °C/122 °F	±0.6 °C/±1.1 °F	±0.2 °C/±0.4 °F	±0.2 °C/±0.4 °F
75 °C/167 °F	±0.9 °C/±1.6 °F	±0.2 °C/±0.4 °F	±0.3 °C/±0.5 °F
100 °C/212 °F	±1.3 °C/±2.3 °F	±0.5 °C/±0.9 °F	±0.3 °C/±0.5 °F

**WIRING**



**PRODUCT SELECTION CHART**

Part Number	Model Number	Description	Probe Length (mm)	System
5123158010	STP120-70	Pipe Temperature Sensor STP120-70	70	Vista
5123160010	STP120-120	Pipe Temperature Sensor STP120-120	120	Vista
5123162010	STP120-220	Pipe Temperature Sensor STP120-220	220	Vista
5123230000	STP220-70	Pipe Temperature Sensor STP220-70	70	I/NET
5123232000	STP220-120	Pipe Temperature Sensor STP220-120	120	I/NET
5123234000	STP220-220	Pipe Temperature Sensor STP220-220	220	I/NET
5126090000	STP620	Pipe Temperature Sensor STP620	100	Satchwell